Response Under 37 C.F.R. § 1.111 Attorney Docket No.: Q79570

U.S. Application No.: 10/767,062

## **REMARKS**

Claims 1-23 are pending in the application.

## I. Response to Rejection of Claims 1-11, 13-15, 17, 18, 22 and 23 under 35 U.S.C. § 103(a)

Claims 1-11, 13-15, 17, 18, 22 and 23 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera (JP 10-95942) in view of Kimura et al. (U.S. Patent 6,521,031).

Applicants respectfully traverse the rejection and submit that the cited references do not render the present invention obvious.

The present invention according to claim 1 is an ink-jet recording ink, comprising a pigment and a compound represented by the following General formula (I):

wherein in General formula (I), R represents a hydrophobic group, or a group derived from a hydrophobic polymer; X represents a bivalent linking group having a hetero bond; n is an integer from 10 to 3500; and structural units of repeated Y comprise at least one structural unit represented by A, C or D, and further comprise 0 to 40% by mole of structural units represented by B:

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wherein in structural units A through D,  $R^1$  represents a hydrogen atom or an alkyl group having 1 to 6 carbon atoms;  $R^2$  represents a hydrogen atom or an alkyl group having 1 to 10 carbon atoms;  $R^3$  represents a hydrogen atom or a methyl group;  $R^4$  represents a hydrogen atom,  $-CH_3$ ,  $-CH_2COOH$  or an ammonium salt thereof or alkali metal salt thereof, or -CN;  $Z^1$  represents a hydrogen atom, -COOH or an ammonium salt thereof or alkali metal salt thereof, or  $-CONH_2$ ; and  $Z^2$  represents -COOH or an ammonium salt thereof or alkali metal salt thereof,  $-SO_3H$  or an ammonium salt thereof or alkali metal salt thereof or alkali metal salt thereof,  $-CONH_2$ ; and salt thereof,  $-CH_2SO_3H$  or an ammonium salt thereof or alkali metal salt thereof,  $-CONHC(CH_3)_2CH_2SO_3H$  or an ammonium salt thereof or alkali metal salt thereof, or  $-CONHCH_2CH_2CH_2N^+(CH_3)_3CI^-$ . Accordingly, the inkjet ink of the present invention comprises a pigment.

Kubodera is directed to an aqueous inkjet ink containing <u>water-soluble dye</u>. *See*Abstract. Thus, Kubodera does not disclose the use of a pigment in its aqueous inkjet ink.

Accordingly, Kubodera does not teach or suggest each and every element of claim 1.

In addition, Kimura does not make up for the deficiencies of Kubodera since Kimura is directed to an ink containing oil-soluble dye, and thus, also fails to disclose the use of a pigment in the ink.

Further, the disclosure of Kimura cited by the Examiner relates to a bivalent group that can be contained in the ring Q of formula (I) of Kimura. *See* col. 6, lines 15-26. Formula (I) of Kimura represents an oil-soluble dye and has no technical relationship with formula (I) of Kubodera. Accordingly, one of ordinary skill in the art would not be motivated to use the

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bivalent group used in the oil-soluble dye of Kimura in the compound of formula (I) of Kubodera, which is functionally and structurally unrelated to the oil-soluble dye of Kimura.

Moreover, the compound of formula (I) of Kubodera is used for achieving good spreading property and ejection property. *See* [0083]. In contrast, the inkjet ink of the presently claimed invention has excellent <u>dispersion stability</u>. *See* pages 43-44 of the present specification. Since the ink of Kubodera does not contain a pigment, Kimura is unrelated to improvement in dispersion stability of pigments.

Finally, each of claims 2-11, 13-15, 17, 18, 22 and 23 depend, directly or indirectly, from claim 1. Thus, it is respectfully submitted that these claims are patentable for at least the same reasons as claim 1.

In view of the above, withdrawal of the rejection is respectfully requested.

## II. Response to Rejection of Claims 12, 16, 19, 20 and 21 under 35 U.S.C. § 103(a)

Claim 12 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera and Kimura, in further view of Leppard et al. (U.S. Patent 6,048,660).

In addition, claims 16 and 20 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera and Kimura, in further view of Aono et al. (JP 07-219113).

Further, claim 19 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera and Kimura, in further view of Yamanouchi et al. (U.S. 2002/0143079).

Finally, claim 21 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kubodera and Kimura, in further view of Nishita (U.S. 2002/0060727).

Applicants respectfully traverse the rejections and submit that the cited references do not render the present invention obvious.

Claims 12, 19, 20, 21 and 26 each depend, directly or indirectly, from claim 1. Thus, it is respectfully submitted that these claims are patentable for at least the same reasons as claim 1, discussed above.

In addition, with respect to claim 12, it is respectfully submitted that Leopard describes a partial structure of formula (I), which is a photoinitiator at column 12, line 54. However, there is no motivation to use the specific partial structure contained in the photoinitiator of Leopard in the compound of formula (I) of Kubodera since there is no technical or structural relationship between these compounds. That is, a *prima facie* showing of obviousness requires (1) a suggestion or motivation in the references or in the knowledge of one of ordinary skill in the art, to modify the references or to combine reference teachings; (2) a reasonable expectation of success; and (3) a teaching or suggestion of all claimed limitations. In this case, the Examiner simply asserts that one of ordinary skill in the art would without providing any motivation as to why one of ordinary skill in the art would do so.

In view of the above, withdrawal of the rejections is respectfully requested.

## III. <u>Conclusion</u>

For the foregoing reasons, reconsideration and allowance of claims 1-23 is respectfully requested.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,

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